

LISTING OF THE CLAIMS

This listing of the claims replaces all prior versions and listings of the claims in the Subject Application:

1-16. (Canceled)

17. (Previously Presented) A screen printable formulation comprising:
a matrix comprising a polymer material; and
metallic fillers with domain size less than 100 nanometers and an aspect ratio greater than one;

wherein the metallic fillers are coated with a layer of material that is compatible with the matrix, the coating comprising a material selected from the group consisting of a polymer and a monomer.

18. (Previously Presented) The screen printable formulation of claim 17 wherein the fillers are nanowhiskers.

19. (Previously Presented) The screen printable formulation of claim 17 wherein the fillers are fibers.

20. (Previously Presented) The screen printable formulation of claim 17 wherein the fillers are plates.

21. (Previously Presented) The screen printable formulation of claim 17 wherein the screen printable formulation is an ink.

22. (Previously Presented) The screen printable formulation of claim 17 wherein the screen printable formulation is a paste.

23. *(Previously Presented)* The screen printable formulation of claim 17 wherein the fillers comprise an element selected from the group consisting of aluminum, barium, bismuth, cadmium, calcium, cerium, cesium, cobalt, copper, europium, gallium, indium, iron, lanthanum, lithium, magnesium, manganese, molybdenum, neodymium, nickel, niobium, potassium praseodymium, scandium, sodium, strontium, tantalum, tin, titanium, tungsten, vanadium, ytterbium, yttrium, zinc, and zirconium.

24. *(Previously Presented)* A screen printable formulation comprising:
a matrix comprising a polymer material; and
ceramic nanofillers with domain size less than 100 nanometers and an aspect ratio greater than one;
wherein the ceramic nanofillers are coated with a layer of material that is compatible with the matrix, the coating comprising a material selected from the group consisting of a polymer and a monomer.

25. *(Previously Presented)* The screen printable formulation of claim 24 wherein the fillers are nanowhiskers.

26. *(Previously Presented)* The screen printable formulation of claim 24 wherein the fillers are fibers.

27. *(Previously Presented)* The screen printable formulation of claim 24 wherein the fillers are plates.

28. *(Previously Presented)* The screen printable formulation of claim 24 wherein the screen printable formulation is an ink.

29. *(Previously Presented)* The screen printable formulation of claim 24 wherein the screen printable formulation is a paste.

30. *(Previously Presented)* The screen printable formulation of claim 24 wherein the fillers comprise an element selected from the group consisting of aluminum, barium, bismuth, cadmium, calcium, cerium, cesium, cobalt, copper, europium, gallium, indium, iron, lanthanum, lithium, magnesium, manganese, molybdenum, neodymium, nickel, niobium, potassium praseodymium, scandium, sodium, strontium, tantalum, tin, titanium, tungsten, vanadium, ytterbium, yttrium, zinc, and zirconium.

31. *(Previously Presented)* The screen printable formulation of claim 24 wherein the filler comprises at least one element from the group consisting of aluminum, antimony, boron, carbon, germanium, indium, nickel, nitrogen, oxygen, phosphorus, selenium, silicon, sulfur, or tellurium.

32. *(Currently Amended)* A screen printable formulation comprising:
a matrix comprising a polymer material; and
nanofillers with domain size less than 250 nanometers, ~~and the nanofillers~~
~~comprise consisting of~~ copper;
wherein the nanofillers are coated with a layer of material that is compatible with the matrix, the coating comprising a material selected from the group consisting of a polymer and a monomer.

33. *(Currently Amended)* A screen printable formulation comprising:
a matrix comprising a ~~ceramic~~ polymer material; and
nanofillers with domain size less than 100 nanometers, the nanofillers selected from the group consisting of ~~metallic nanofillers and ceramic nanofillers~~ copper nanofillers, silver nanofillers, gold nanofillers, palladium nanofillers, platinum nanofillers, and combinations thereof;
wherein the nanofillers are coated with a layer of material that is compatible with the matrix, the coating comprising a material selected from the group consisting of a polymer and a monomer.

34. *(Previously Presented)* A product manufactured using the printable formulation of claim 17.

35. *(Previously Presented)* A print manufactured using the printable formulation of claim 17.

36. *(Previously Presented)* A product manufactured using the printable formulation of claim 24.

37. *(Previously Presented)* A print manufactured using the printable formulation of claim 24.

38. *(Previously Presented)* A product manufactured using the printable formulation of claim 32.

39. *(Previously Presented)* A print manufactured using the printable formulation of claim 32.

40. *(Previously Presented)* A product manufactured using the printable formulation of claim 33.

41. *(Previously Presented)* A print manufactured using the printable formulation of claim 33.